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10/088,468

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EXAMINER

DIEP, NHON THANH

ART UNIT

PAPER NUMBER

2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/088,468

Applicant(s)

NISHIO ET AL.

Examiner

Nhon T. Diep

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34,35 and 38-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-35, 38-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/26/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 34-34, 38-44 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 51-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 51, line 1, claim 51, lines 1-2 and claims 53, line 1 and 3 recites either the limitation "the" or "said" in "the transmission" or "said transmission". There are insufficient antecedent basis for these limitations in the claims.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, in view of Tahara et al and further in view of Maruoka.

Kato et al discloses a moving picture coding and decoding apparatus as shown in Figures 1 and 5, and substantially the same transmission apparatus for transmitting a

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video signal through a transmission path as claimed in claim 34, comprising substantially the same decoder (i.e., as provided in Figure 5) to decode a compressively coded signal to output picture signals, including a base-band luminous signal and base-band color different signals (see section [0049]); and a control signal which is generated based on the compressively coded signal signals (Notice that field memory group 57 provides information to motion compensator 56 and the information provided must be the control signal to control the motion compensation since, for example, intra coded frame would not be used for motion compensation as is in the case of inter coded frame). Kato et al does not particularly disclose an encoder to time-divisionally multiplex the picture signals in a video period and the control signal in a retrace period, thereby to encode the picture signals and the control signal into transmission path signals suited to the transmission path as claimed in claim 34. However, Tahara et al discloses a transcoding system using encoding history information as shown in Figure 15, and teaches the conventional multiplexing of encoded picture parameters (control signal) and video signal (i.e., 103 of Figure 15 and see column 23, line 46 to column 24, line 28) in a transmission path after video decoder (i.e., 102, 104 of Figure 15). It is to be noted that Tahara fails to disclose the specifics of multiplexing the picture signals in a video period and the control signal in a retrace period, thereby to encode the picture signals and the control signal into transmission path signals suited to the transmission path as claimed. Maruoka however discloses a television signal receiver system as shown in Figure 1 B, and teaches the conventional use of an encoder for time division multiplexing of any two digital signals during the retrace interval of the video signal, and

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the encoding of the picture signals and control signal into transmission path signals suited to the transmission path (i.e., the transmission of the multiplexed digital signal as a packet, see column 1, line 59 to column 2, line 13). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Maruoka, and Tahara et al references in front of him/her and the general knowledge of time division multiplexing systems, would have had no difficulty in providing an encoder for time division multiplexing of at least two digital signals which should be the control signal and the video signal as taught by Tanaka et al during the retrace interval of the video signal as further taught by Maruoka, and the encoding of the picture signals and control signal into transmission path signals suited to the transmission path for the transmission system of Kato et al for the same well known time division multiplexing of video and associated data during the retrace period for transmission to a receiver purposes as claimed.

6. Claims 35, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, in view of Tahara et al and further in view of Maruoka, and further in view of Liu et al.

The combination of Kato et al, Maruoka, and Tahara et al discloses substantially the same transmission apparatus as above, further including wherein the control signal includes information for use in controlling image quality of the picture signals (see column 20, lines 4-16 of Tahara et al), and wherein the control signal is information indicating at least one of (1) a picture of the picture Signals is any of an I picture, a P

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picture, and a B picture, (2) a picture of the picture signals is either a picture Picked up by progressive scanning or a picture picked up by interlaced scanning, (3) a picture of the picture signals is either a top field or a bottom field picture, (4) a compression ratio of MPEG, and (5) field repeat information of a picture of the picture signals (see sections [0058], [0059], and [0096] to [0100] of Kato et al). The combination of Kato et al, Maruoka, and Tahara et al does not particularly disclose an I2C controller to control an I2C signal, and a CPU to control the I2C controller and the decoder, wherein the decoder is controlled by the CPU so as to output the picture signals which are displayable in a reception apparatus, on the basis of reception apparatus information that is received through the I2C controller as claimed in claims 35 and 43. However, Liu et al discloses a method of controlling the transfer of information across an interface between two buses as shown in Figure 1, and teaches the conventional use of an I2C controller (see column 3, lines 9- 46) to control an I2C signal and a CPU for controlling various system devices, which includes an I2C controller and a video decoder so that the decoder may therefore output pictures signals to be displayed in a reception apparatus on the basis of reception apparatus information that is received through the I2C controller (see column 1, line 56 to column 2, line 14, column 3, lines 9-46).

Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Maruoka, Tahara et al, and Liu et al references in front of him/her and the general knowledge of CPU control of system devices, would have had no difficulty in providing the I2C controller and CPU for controlling the I2C controller and the video decoder as taught by Liu et al as part of the system of Kato et al so that the video decoder of Liu

may be controlled by the CPU in order to output the picture signals which are displayable in a reception apparatus on the basis of reception apparatus information that is received through the I2C controller for the same well known flexibility and lowering of interconnecting costs by reducing board space and pin count by utilizing the I2C bus architecture and communication among various interfaces through the CPU purposes as claimed.

7. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al in view of Tahara et al and further in view of Maruoka.

Kato et al discloses a moving picture coding and decoding apparatus as shown in Figures 1 and 5, and substantially the same reception apparatus for receiving a video signal through a transmission path (see Figure 5) as claimed in claim 39, comprising substantially the same decoder (i.e., as provided in Figure 5) to decode transmission path signal into picture signals, including a base-band luminous signal and base-band color different signals (see section [0049]), and a control signal (Notice that field memory group 57 provides information to motion compensator 56 and the information provided must be the control signal to control the motion compensation since, for example, intra coded frame would not be used for motion compensation as is in the case of inter coded frame), the transmission path is generated by coding the control signal (see sections [0058], [0100]), which is generated based on a compressively coded signal, and the video signal so as to be suited to the transmission path (see Figures 1 and 5). Kato et al does not particularly disclose, though, coding the control

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signal to be used for controlling image quality, an image quality control to control the image qualities of the picture signals on the basis of the control signal, and the control signal being time division multiplexed in a retrace period as claimed in claim 39.

However Tahara et al teaches the conventional use of a control signal for controlling the image qualities of the picture signals (see column 20, lines 4- 16), and multiplexing of encoded picture parameters and video signal (i.e., 103 of Figure 15 and see column 23, line 46 to column 24, line 28) in a transmission path after video decoder (i.e., 102, 104 of Figure 15). It is to be noted that Tahara fails to disclose the specifics of time division multiplexing the control signal in a retrace period as claimed. However, Maruoka however discloses a television signal receiver system as shown in Figure 1 B, and teaches the conventional use of an encoder for time division multiplexing of any two digital signals (in this particular case, the two digital signals are the digital audio signal and the independent data signal) during the retrace interval of the video signal, and the encoding of the picture signals and control signal into transmission path signals suited to the transmission path (i.e., the transmission of the multiplexed digital signal as a packet, see column 1, line 59 to column 2, line 13). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Tahara et al, and Maruoka references in front of him/her and the general knowledge of image quality controls of video and time division multiplexings, would have had no difficulty in providing an image quality control signal as taught by Tahara et al as well as the time division multiplexing of control data in a retrace period as taught by Tahara et al and Maruoka within the system of Kato et al for the same well known control of video



qualities and time division multiplexing of information during a retrace interval of a video period for transmission to a receiver purposes as claimed.

8. Claims 38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, Tahara et al, and further in view of Maruoka as applied to claim 39 in the above paragraph (4), and further in view of Ishikawa et al of record (5,969,767) and Liu et al of record (5,987,554).

The combination of Kato et al, Tahara et al, and Maruoka discloses substantially the same reception apparatus as above, further including wherein the control signal is information indicating at least one of (1) a picture of the picture signals is any of an I picture, a P picture, and a B picture, (2) a picture of the picture signals is either a picture picked up by progressive scanning or a picture picked up by interlaced scanning, (3) a picture of the picture signals is either a top field or a bottom field picture, (4) a compression ratio of MPEG, and (5) field repeat information of a picture of the picture signals (see sections [0058], [0100] of Kato et al), and wherein the control signal is used for controlling image quality (see column 20, lines 4-16 of Tahara et al).

The combination of Kato et al, Tahara et al, and Maruoka does not particularly disclose the followings:

(a) a ROM table to hold reception apparatus information indicating performance for making the picture signals displayable as claimed in claims 38 and 40; and

(b) an I2C controller to output the reception apparatus information stored in the ROM table to a transmission apparatus on the basis of an I2C signal outputted from the transmission apparatus as claimed in claims 38 and 40.

Regarding (a), Ishikawa et al discloses a multipicture video signals display apparatus as shown in Figures 13-15, and teaches the conventional use of a ROM table (i.e., 3332 of Figure 15) for holding reception apparatus information indicating performance for making the picture signal displayable (see column 8, lines 50-67). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Tahara et al, Maruoka, and Ishikawa et al references in front of him/her and the general knowledge of the use of tables for displays, would have had no difficulty in providing the ROM table of Ishikawa et al for the system within the combination of Kato et al, Tahara et al, and Maruoka so as to hold reception apparatus information indicating performance for making the signal displayable for the same well known display of video based on stored information data purposes as claimed.

Regarding (b), Liu et al discloses a method of controlling the transfer of information across an interface between two buses as shown in Figure 1, and teaches the conventional use of an I2C controller (see column 3, lines 9-46) to control an I2C signal as well as the use of the I2C controller and a CPU for controlling various system devices, which includes video encoders and decoders (see column 1, line 56 to column 2, line 14, column 3, lines 9-46). It is hence considered obvious to use the I2C controller of Liu et al so as to output the reception apparatus information stored in the ROM table (i.e., as provided by Ishikawa et al, see 3332 of Figure 15 of Ishikawa et al) to a

transmission apparatus on the basis of an I2C signal outputted from the transmission apparatus (see Figures 13-15 of Ishikawa et al). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Tahara et al, Maruoka, Ishikawa et al, and Liu et al references in front of him/her and the general knowledge of CPU and I2C control of system devices, would have had no difficulty in providing an I2C controller to control an I2C signal as well as the use of the I2C controller and a CPU for controlling various system devices, which includes video encoders and decoders as taught by Ishikawa et al for the system within the combination of Kato et al, Tahara et al, and Maruoka, so that the I2C controller of Liu et al is provided so as to output the reception apparatus information stored in the ROM table of Ishikawa et al to a transmission apparatus on the basis of an I2C signal outputted from the transmission apparatus for the same well known control and transmission of video via CPU and I2C control interfacing purposes as claimed.

9. Claims 45, 47 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, in view of Tahara et al and further in view of Maruoka, and further in view of Gould et al (US 6,583,793).

As applied to claim 34 above, it is noted that the combination of Kato et al, Tahara et al and Maruoka does not particularly disclose that said transmission apparatus is adapted so that any one of a plurality of different types of display units can be connected to said transmission apparatus for receipt of said video signal transmitted by said transmission apparatus, wherein each of said plurality of different types of display units has a video input interface and a display device as specified in claim 45;

said transmission apparatus is provided by a transmission apparatus set top box (STB) as specified in claim 46; wherein said transmission apparatus is a digital camera as specified in claim 47; and said transmission apparatus is adapted so that any one of a plurality of different types of television monitors can be connected to said transmission apparatus as specified in claim 49. Gould et al teaches to use a set top box connected to a transmission line to receive encoded television signals from different devices such as digital camera, etc and to decode the encoded signal for display on different types of display units. And therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kato et al, Tahara et al and Maruoka by using set top box with various decoding capacities for receiving different encoded video signals and for decoding the encoded video signals for display on different types of displaying units because a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

10. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, in view of Tahara et al and further in view of Maruoka and further in view of Gould et al (US 6,583,793) and Fried et al (US 5,686,872).

As applied to claim 45 above, it is noted that the combination of Kato et al, Tahara et al, f Maruoka and Gould et al does not particularly disclose said transmission apparatus is a notebook computer. Fried et al teaches in one case, the equipment

containing the transmitter (e.g., a notebook computer). And therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use notebook computer as taught by Fried et al for transmitting stored data.

11. Claims 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, Tahara et al, and further in view of Maruoka and further in view of Ishikawa et al of record (5,969,767) and Liu et al of record (5,987,554) and further in view of Gould et al.

As applied to claims 40 and 41 above, it is noted that the combination does not particularly disclose that said receiving apparatus is adapted so that any one of a plurality of different types of display units can be connected to said reception apparatus for receipt of said video signal transmitted by said reception apparatus, wherein each of said plurality of different types of display units has a video input interface and a display device as specified in claim 50; said transmission apparatus is provided by a transmission apparatus set top box (STB) as specified in claim 52; and said transmission apparatus is adapted so that any one of a plurality of different types of television monitors can be connected to said transmission apparatus as specified in claim 53. Gould et al teaches to use a set top box connected to a transmission line to receive encoded television signals from different devices such as digital camera, etc and to decode the encoded signal for display on different types of display units. And therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the above combination by using set top box

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with various decoding capacities for receiving different encoded video signals and for decoding the encoded video signals for display on different types of displaying units because a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**NHON DIEP**  
**PRIMARY EXAMINER**